

What is claimed is:

1. A hand held fuel storage container for pouring fuel into a receiving tank, the container comprising:

a housing, said housing having a bottom end wall, an upper end wall, and a generally cylindrical sidewall extending between the endwalls,

a fill tube for introducing fuel into said housing, said fill tube having opposite ends with one of said ends connected to said sidewall and communicating with the interior of said housing and the other of said ends spaced upwardly from said upper end wall and forming an inlet to receive and introduce fuel into said fill tube,

a pour spout for dispensing fuel from said housing, said pour spout having opposite end portions with one of said end portions connected to the upper end wall and communicating with the interior of said housing and the other of said end portions spaced upwardly from the upper end wall, said other end portion being insertable into a receiving tank and forming an outlet to dispense fuel from said housing and into said receiving tank,

an axially compressible sleeve disposed about the dispensing end portion of said pour tube, said sleeve including a rearward end fixedly secured to the pour tube and a forward end positioned proximate to the discharge end of the pour tube, wherein insertion of the pour spout into the receiving tank substantially simultaneously acts to bring the forward end of the sleeve into vapor sealing relation about the inlet to the receiving tank and the sleeve to

axially compress and expose and permit a greater forward end portion of said pour tube to be inserted into the receiving tank,

a removable closure cap for selectively closing the inlet end of said fill tube, and

vent means for allowing the passage of air through said closure cap and into said fill tube to promote fuel flow through said pour tube.

2. The fuel storage container as claimed in Claim 1, wherein

said closure cap includes a top wall and a sidewall, said top wall having an upper surface exposed to outside air and a lower surface, and said sidewall closing said cap sidewall and forming an annular recess below said lower surface, and

said vent means comprises a valve, said valve being movable between first and second positions, respectively, for permitting and preventing outside air to pass between the upper and lower surfaces of the cap.

3. The fuel storage container as claimed in Claim 2, wherein

said vent means further comprises an interior chamber in said cap top wall, a bore extending between said interior chamber and the upper surface of said top wall, and a passage extending between said chamber and the lower surface of said top wall, and

said valve is disposed in said bore.

4. The fuel storage container as claimed in Claim 3, wherein

said valve has forward and rearward ends, respectively, disposed within said interior chamber and above said upper surface, a central passageway

extending rearwardly from the forward end, and a radial passageway proximate to the rearward end of said valve, and

said radial passageway, when said valve is in said first and second positions, respectively, is above the upper surface, wherein to permit entry of air into the central passageway, and below the upper surface and enclosed by the bore, wherein to prevent entry of air into the central passageway.

5. The fuel storage container as claimed in Claim 4, wherein

the interior chamber includes a chamber wall, said chamber wall including a detent, and

the forward end of said valve is has a shape complementary to the shape of said detent, said forward end being adapted to seat within said detent and close the opening to the central passageway, wherein to prevent backflow of fuel thereinto when the valve is in the second position.

6. The fuel storage container as claimed in Claim 1, further comprising a handle for positioning and carrying said container, and wherein

said fill tube and said pour spout are spaced from one another and integrally formed with the container, and

said handle comprises, at least in part, a handle portion connected to the sidewall of said container, and said fill tube.

7. A hand held fuel container for receiving and dispensing fuel, the fuel container comprising:

upper and lower endwalls and a sidewall extending between said endwalls, said walls cooperating to form an interior chamber for receiving fuel,

a pour tube for dispensing fuel into a receiving tank, said pour tube including an inlet end connected to said upper endwall for receiving fuel from the chamber and a discharge end adapted to be inserted into the receiving tank for dispensing fuel thereinto,

a fill tube for receiving and introducing fuel to the interior chamber, the fill tube being spaced from the pour tube and having an inlet end connected to said sidewall and an outlet end for receiving fuel,

a closure cap, said closure cap being removably connected in closing relation to the outlet end of said fill tube and provided with an air passage for passing air external to said chamber into said fill tube when said cap is connected to said fill tube, and wherein said closure cap includes a closure valve for permitting and preventing said external air to pass through said air passage, and

means for sealing about the inlet opening of the receiving tank when the discharge end of the pour tube is inserted into the receiving tank wherein to inhibit vapors from escaping to the atmosphere during dispensing.

8. A portable hand held fuel container, comprising

a pour tube having a lower end connected to the container and an outlet end for dispensing fuel from the container,

a fill tube having a lower end connected to the container and an inlet end for introducing fuel into the container, said fill tube being separate and apart from the pour tube,

a removable closure cap to close the inlet end to the fill tube,

a vent arrangement in the closure cap that permits and prevents exterior air to enter to fill tube to enhance pouring and inhibit fluid flow through the fill tube in case of overturning of the container, and

a vapor seal member connected to the outlet end portion of the pour tube, said seal member being adapted during pouring to simultaneously seal about the fuel inlet to a fuel receiving tank and axially compress rearwardly of the outlet end wherein to permit deep insertion of the outlet end of the pour tube into the receiving tank.

9. The portable hand held fuel container as claimed in Claim 8, wherein

said vapor seal member comprises a cylindrical sleeve, said sleeve having a rearward and forward end portion, respectively, fixed to and movably disposed at the dispensing end of the pour tube, and further wherein said cylindrical sleeve is comprised of a continuous succession of longitudinally spaced undulations to enable axial compression of the sleeve.

10. The portable hand held fuel container as claimed in Claim 9, wherein

the forward end portion of said cylindrical sleeve forms a frusto-conical end face, said end face being adapted to force the sleeve axially rearwardly upon engagement with the fuel tank.

11. The portable hand held fuel container as claimed in Claim 8, wherein

said closure cap includes a lower surface and an upper surface, said lower surface being juxtaposable, at least in part, against the inlet end of the fill tube, and

said vent arrangement comprises said closure cap including a central chamber, an elongated valve stem mounted for movement relative to the closure cap, the stem including an upper end portion positionable above said upper surface and within said closure cap and a lower end portion in said central chamber, a first passageway for communicating air from the

upper end portion to the lower end of the stem, and a second passageway extending between the chamber and the lower surface of said closure cap.

12. The portable hand held fuel container as claimed in Claim 8, wherein
said container includes an upper endwall, a sidewall, and a central geometrical axis, and

said pour tube includes an upper end portion and a lower end portion, the end portions being disposed at an acute angle to one another, and the lower end portion being substantially aligned with the central geometrical axis and projecting generally coaxially from the upper endwall of the container.

13. The portable hand held fuel container as claimed in Claim 8, wherein
said container includes an upper endwall, a sidewall, and a central geometrical axis, and

said fill tube includes an upper end portion and a lower end portion, the end portions being disposed at an acute angle to one another, wherein the lower end portion extends at an acute angle to the sidewall of the container, and the upper end portion is disposed in generally parallel relation to the central geometrical axis of the container.

14. The portable hand held fuel container as claimed in Claim 8, wherein
said container comprises a top endwall, a flat bottom endwall, and a generally cylindrical sidewall extending between the endwalls, the sidewall being defined by a central geometrical axis, and

each said tube has a lower end portion and an upper end portion disposed at an acute angle to the upper end portion, wherein the lower end of the fill tube

is connected to the sidewall and the lower end of the pour tube is connected to the top end wall.

15. The portable hand held fuel container as claimed in Claim 14, further comprising a handle for carrying and positioning said container, said handle comprising an upper handle portion and a lower handle portion, said upper and lower handle portions being integrally formed with and projecting from the sidewall of the container, and said upper handle portion comprising a portion of the fill tube disposed above the top endwall of the container.

16. The portable hand held fuel container as claimed in Claim 15, wherein the top end wall of the container is generally conical in shape and forms a narrowed throat portion, the narrowed throat portion of the top wall forming the inlet to the pour tube, and

the upper end of the fill tube and the narrowed throat portion are approximately at the same level.

17. A closure cap for closing the inlet end of a fill tube of a fuel container, the closure cap comprising:

a circular top wall and a cylindrical sidewall, said sidewall encircling said top wall and adapted to secure to the inlet end of the fill tube, and said top wall having upper and lower surfaces, said upper surface defining an exterior surface exposed to the atmosphere and said lower wall defining an interior surface adapted to be juxtaposed against the inlet end of the fill tube,

passage means for passing air between the upper and lower surfaces of said top wall, and

a manually operated valve mounted in the cap for movement between a first position and a second position, the first position permitting air to pass through said passage means and the second position preventing air to pass through said passage means.

18. The closure cap as claimed in Claim 17, wherein

said passage means includes a central chamber, and first and second passages, respectively, for communicating air between said central chamber and said upper surface and between said central chamber and said lower surface.

19. The closure cap as claimed in Claim 18, further comprising:

a boss projecting from said upper surface of said top wall, said boss including a bore therethrough, and wherein

said chamber is disposed between said upper and lower surfaces and said first air passage extends through said boss to communicate outside air to said chamber.

20. The closure cap as claimed in Claim 19, wherein

said bore is provided with thread,

said valve comprises an elongated stem, the stem having first and second ends, a threaded exterior, a central passage extending rearwardly from an opening formed at the first end, and a radial passage proximate to the second end, said stem being threadably engaged with the threaded bore for relative axial movement thereto, and said radial passage opening on the exterior of said stem and extending between the opening and the central passage, and

said first passage comprises said central and radial passages, wherein movement of the stem positions the radial passage and opening thereof above the upper surface of said cap, wherein to permit air to pass into the chamber and through the second passage, and below the upper surface of said cap and into closed relation with the wall of the bore, wherein to prevent air and fluids to pass through the passage means.

21. The closure cap as claimed in Claim 19, further comprising
a valve head formed at the second end of said valve stem to manipulate said valve, wherein

a first seal member, said first seal member being disposed between the valve head and the upper end face of the boss and adapted to be compressed against the end face by the head when the valve stem is in the closed position wherein to seal the interface therebetween, and

a second seal member, said second seal member being seated against the lower surface of said top wall and adapted to be compressed against the inlet end face of the fill tube wherein to seal the interface therebetween.

22. A hand held fuel storage container for pouring fuel into a receiving tank, the container comprising:

a fill tube, said fill tube including an inlet for introducing fuel into the container,

a vent cap, said vent cap removably connected to said inlet and including a valve movable between open and closed positions for selectively permitting and

preventing the passage of air into the fill tube wherein to promote fuel flow from said container,

an outlet spaced from said fill tube, said outlet for dispensing fuel from said container, and

a fuel dispensing subassembly removably connected to said outlet.

23. The hand held fuel storage container as claimed in Claim 22, further comprising

means for coupling said subassembly to said outlet, and

said fuel dispensing subassembly comprises a section of tubing having an inlet end and a discharge end, and an axially compressible sleeve disposed about the section of tubing and having rearward and forward ends, respectively, proximate to the inlet and discharge ends, wherein said rearward end is fixedly secured to the section of tubing, said forward end is adjacent to the discharge end of the pour tube, and insertion of the discharge end into the receiving tank substantially simultaneously acts to bring the forward end of the sleeve into vapor sealing relation about the inlet to the receiving tank and axially compress and permit a greater forward end portion of said tubing section to be inserted into the receiving tank

24. The hand held fuel storage container as claimed in Claim 22, further comprising:

means for coupling said subassembly to said outlet, and

said fuel dispensing subassembly comprises the pouring spout disclosed in United States Patent No. 4,921,147.